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**THE 1990 ALL ALBERTA STUDY**  
**OF THE HIV/AIDS-RELATED KNOWLEDGE,**  
**ATTITUDES, AND BEHAVIOURS OF ALBERTANS**

**Final Report**

Prepared for: The Provincial AIDS Program  
Alberta Health

Prepared by: John W. Gartrell, Ph. D.  
&  
Allison L. McKinnon, M. Ed.  
**Thames Group Research**

February 1991



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The 1990 All Alberta Study was administered and partly supported by the Population Research Laboratory and the Department of Sociology of the University of Alberta.

## EXECUTIVE SUMMARY

In 1987, the strategy document "Education and Caring: Alberta's Program for the Prevention, Management and Control of AIDS" established the foundation for the Alberta AIDS Program. It included a goal "to research outcomes of prevention, control and treatment goals", and an objective to "assess the impact and effectiveness of the prevention and control program" (ACOH, 1987;29). In 1990, the **All Alberta Study of the HIV/AIDS-Related Knowledge, Attitudes, and Behaviours of Albertans** was conducted as a means to address this goal and objective, and to obtain specific information relevant to the prevention, management, and control of AIDS in Alberta.

Specific objectives of the study included the following: (1) To estimate the nature and extent of self-assessed risk for acquisition of the human immunodeficiency virus (HIV) and AIDS among a representative sample of Albertans as indicated by self-reports of 'high risk' behaviours for HIV transmission and perceived chances of getting AIDS; (2) To estimate the extent to which Albertans personally know, or have known, a person with AIDS or the AIDS virus, and their knowledge of HIV seroprevalence in the Canadian population; (3) To identify the attitudes of a representative sample of Albertans regarding mandatory AIDS testing of employees in the workplace, personal AIDS testing, disclosure of the results of AIDS tests, AIDS testing without informed consent, and target groups for AIDS testing; (4) To assess Albertans' attitudes toward persons with AIDS, including tendencies to agree or disagree that persons with AIDS 'deserve what they got', attitudes toward the school attendance of children with those who have



AIDS, and the provision of health care for persons with AIDS; and (5) To identify the implications of major findings of this study for the development of public policy, programs and services for the general population and persons with AIDS in Alberta.

A special set of eleven questions on HIV/AIDS-related knowledge, attitudes, and behaviours were developed by the provincial AIDS Program for inclusion on the 1990 All Alberta Survey (AAS) conducted by the Population Research Laboratory (PRL) of the University of Alberta. These questions were administered through face-to face and telephone interviews conducted during February and March of 1990.<sup>1</sup> A total of 1,245 adult Albertans participated in the study, with 25.5% residing in Edmonton, 28.0% in Calgary, and 46.5% living in regions outside these two urban centres. Men and women were equally represented in the sample, and, when classified by age, 23% were in the age range from 18 to 29 years, 31% were in the range from 30 to 39 years, 19% were in the range from 40 to 49 years, 12% were in the range from 50 to 59 years, and 15% were 60 years of age or older. About 71% of all respondents were married, while 16.2% were single, 7.4% were divorced, and 5.2% were widows or widowers.

## **Major Findings**

"High-risk" sexual activity has been the most common route of HIV transmission in Alberta, as more than 85% of all AIDS cases reported in the

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<sup>1</sup>A copy of the survey questions are contained in Appendix A of this report.

province to December, 1990 were linked to unsafe sexual practices. However, complacency about AIDS has been a major problem among Albertans (ACOH, 1987;1), and many Albertans do not consider themselves to be at risk of acquiring the AIDS virus.

In this study, respondents' risk status for HIV infection and AIDS was measured on the basis of self-reports of participation in any one of five high risk behaviours<sup>2</sup>, and perceived chances of being infected with the AIDS virus. This self-report data indicate that about 17% of the 1,245 respondents are at 'high risk' for HIV infection. However, only 1.8% rate their chances of getting AIDS as 'high', and a further 5.1% think it is 'medium'. More than 50% of these adult Albertans think they have 'no chance' of HIV infection or developing AIDS. Further, persons who engage in behaviours risky for HIV infection are not more likely to see themselves as being at greater risk for getting AIDS, and are not more likely to use condoms as a means of preventing HIV transmission. They are also somewhat less likely to be well-informed about the direct relationship between HIV seropositivity and the likelihood of developing AIDS.

An interesting, but unexpected finding was that a small minority (4.3%) of respondents spontaneously identified AIDS as an important issue.

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<sup>2</sup>That is, those who (1) used drugs by needle at any time since 1977 (except diabetics), (2) had haemophilia and received clotting factor concentrates since 1977, (3) were male and had sex with another male at any time since 1977, (4) had sex for money or drugs at any time since 1977, or (5) since 1977, had been the sex partner of anyone who would answer 'yes' to any of the above. Respondents were also classified as engaging in sexual behaviours risky for HIV infection if they responded positively to the question: "In the last two years have you had at least one new sex partner?", and indicated that a condom was not always used with new sexual partners.

This may indicate that AIDS has a fairly high profile among Albertans. Alternatively, this result could reflect a general lack of concern about AIDS among the general population of the province and the generally low levels of perceived risk for HIV infection and AIDS reported by the majority of the study sample. Future surveys should follow-up on these possibilities, especially in terms of their implications for AIDS prevention and education.

Almost 10% of all respondents stated that they personally knew, or had known, a person with AIDS. Consistent with the geographical profile of AIDS cases in Alberta, Calgarians in this study were more likely to know a person with AIDS. Further, those who personally knew, or have known, a person with AIDS were more likely to rate their chances of getting AIDS as 'high' or 'medium'.

However, personal knowledge of a person with AIDS seems unrelated to knowledge about HIV seroprevalence in the population. Almost half of all respondents were misinformed or uninformed about the strong positive relationship between HIV seropositivity and the likelihood of developing AIDS. This lack of accurate information may possibly lessen perceived personal risks of developing AIDS, and may encourage the public to underestimate the potential size of the AIDS epidemic in this province.

The youngest respondents in this study were most likely to be misinformed about HIV seropositivity and the likelihood of getting AIDS. This finding is disturbing since AIDS is typically a "young person's disease" and young adults have been a specific target of AIDS educational campaigns.



Persons aged 55+ years were most likely to state that they did not know the answers to questions about HIV/AIDS seroprevalence in the population. There were some differences in levels of HIV/AIDS-related knowledge of HIV according to the marital status and education of respondents, but no consistent pattern emerged from the data, suggesting the need for a broadly-based approach to AIDS education and prevention efforts.

With regard to attitudes toward AIDS testing, slightly more than half (55.3%) of the respondents in this study agreed that employers should have the right to require an employee to be tested for HIV seropositivity. Support for mandatory testing of employees in the workplace is greater in regions outside of Edmonton and Calgary, and among those who are aged 55+ years, are married or widowed, have less than a high school education, or think that their personal chances of getting AIDS are low.

One in ten of the Albertans surveyed expected to be personally tested for HIV seropositivity in the next 12 months. Those more likely to expect personal testing for the AIDS virus were those classified as 'High Risk' for HIV infection, those who knew or had known a person with AIDS, and those who perceived their chances of getting AIDS as higher.

Given assurances of the confidentiality of test results, 88.8% of the Albertans in this study said they would agree to have their blood tested for the AIDS virus. These results suggest that Albertans may be quite willing to participate in AIDS testing under assurances of confidentiality of test results, and that should random testing be attempted in a study, refusals to participate would probably not bias the research findings.



When asked about the disclosure of the results of AIDS testing, fully 90.8% of all respondents stated they would insist on knowing the results of their AIDS tests if they volunteered to be tested in a national study of the prevalence of the AIDS virus in the population. This high level of insistence on knowing the results of HIV seropositivity testing did not differ significantly among respondents when they were classified by self-perceived AIDS risk or according to socio-demographic characteristics.

The ethical and legal issue of informed consent was addressed by asking the question, "Should people's blood be tested for the AIDS virus without their knowledge it was being done?" The vast majority of the sample (73.8%) supported the position taken by the provincial government in support of informed consent by individuals for AIDS testing. Those more opposed to AIDS testing with informed consent were males, those aged 55+ years, or those respondents who had less than a high school education.

Blood and organ donors were most often identified (92.1%) as a target group for HIV seropositivity tests, 'even if they do not give consent'. The next most frequently cited groups were prostitutes (73.2%), injection drug users (71.3%), blood recipients (68.9%), health workers (62.6%), homosexual men (60.2%), bisexual men (59.4%), hospital patients (57.8%), and members of the military and airline pilots (36.2%).

The majority of Albertans in this study appeared very tolerant of persons with AIDS, as indicated by the finding that 61.6% disagreed with the statement that "Most AIDS victims deserve what they got". Not surprisingly,

greater tolerance of persons with AIDS was evident among those who personally knew, or had known, a person with AIDS. Those who rated their chances of getting the AIDS virus as 'high' or 'medium' were also much less likely to blame the AIDS victim for getting the disease.

When asked, "If a child with AIDS were to attend my child's school, I would take my child out of the school", about 73% of respondents disagreed with this statement. This suggests that there is not a high level of intolerance among Albertans for school attendance of children with AIDS.

With regard to the provision of health care for persons with AIDS, 87% of these Albertans agreed that, "People who get AIDS deserve first class health care". This support is especially evident among women, persons in the age group from 40 to 54 years, those with higher levels of education, and those who know, or have known a person with AIDS. Further, among all those who agreed that persons with AIDS deserve first class health care, 82% said that this should be provided "regardless of what it costs". Economic restraint in the area of AIDS care and treatment programs does not appear to have much support among the 1,245 adult Albertans who gave their opinions on this subject.

### **Implications of Major Findings**

As relatively few respondents in this study were accurately informed about HIV/AIDS, or practiced safer sexual behaviours so as to prevent HIV transmission, enhancement of provincial AIDS educational programs is strongly recommended. The lack of accurate information about HIV/AIDS

among young adults and among those who report engaging in 'high risk' behaviours underlines the importance of targetting these groups in educational efforts.

Given that most respondents do not perceive that they have even a moderate risk of 'getting AIDS', even if they reported behaviour which places them at greater risk for HIV infection and AIDS, further research should be conducted to examine factors which may influence self-perceptions of risk for AIDS. What social conditions influence the relationship between reported AIDS risk and perceived risk of getting AIDS? Does AIDS information effectively alter this relationship? Furthermore, as those respondents who report behaviours that involve greater risk for HIV seropositivity and AIDS are, nonetheless, not likely to perceive their chances of getting AIDS as 'high', and since safer sexual practices are not widely practised in the high risk groups identified in this study, additional research should be conducted to identify barriers and bridges to safer sexual practices among Albertans.

This survey of attitudes towards AIDS testing suggests that Albertans may be unaware of reasons for current government policies regarding mandatory testing for HIV seropositivity and confidentiality of AIDS test results. These reasons need to be better communicated to the public in order to promote understanding of public policy and issues surrounding AIDS testing, and to allay any unnecessary fears of HIV transmission arising from contacts with members of various social groups.

That the Albertans included in this study generally demonstrate tolerant attitudes toward persons with AIDS, and supported the provision of first health care for this group, suggests that a positive climate currently exists among Albertans for the development and provision of programs and services for persons who are diagnosed as having AIDS.

While it is uncertain whether such positive attitudes may change in future, this survey provides a useful baseline for the measurement of changes in HIV/AIDS-related knowledge, attitudes and behaviours among adult Albertans. It is suggested that a panel study be conducted approximately two years after the time of the initial data collection in order to assess the extent of any such changes among the provincial population. Such background information may be highly useful in the ongoing development, implementation, and evaluation of provincial initiatives toward the prevention, control and management of AIDS in Alberta.



## I. INTRODUCTION

### Background to the Study

In 1987, a strategy document entitled Education and Caring: Alberta's Program for the Prevention, Management and Control of AIDS, established the foundation for the Alberta AIDS Program. It included a goal "to research outcomes of prevention, control and treatment goals", and an objective to "assess the impact and effectiveness of the prevention and control program" (ACOH, 1987;29). In 1990, the **All Alberta Study of the HIV/AIDS-Related Knowledge, Attitudes, and Behaviours of Albertans** was conducted as a means to address this goal and objective, and to obtain specific information relevant to future planning of AIDS policies, programs, and services in this province.

A special set of questions on HIV/AIDS-related knowledge, attitudes, and behaviours were developed by the provincial AIDS Program, Alberta Health, for inclusion on the 1990 All Alberta Survey (AAS) conducted by the Population Research Laboratory (PRL) of the University of Alberta. This was the fourth annual survey of Albertans administered by the Population Research Laboratory, and the second year in which certain survey questions focussed on HIV/AIDS-related issues.<sup>3</sup> The 1990 questionnaire items were designed to estimate the extent of self-assessed risk among respondents for acquisition of the human immunodeficiency virus (HIV), to provide input to

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<sup>3</sup>The Provincial AIDS Program plans to participate in future All Alberta Studies in order to measure longitudinal changes in Albertans' HIV/AIDS-related knowledge, attitudes, and behaviours.

AIDS educational campaigns, and to inform public policy of the opinions of a representative cross-section of Albertans on key issues surrounding HIV/AIDS-related policies, programs, and services for the general population and for persons with AIDS.

The survey questionnaire was administered to a representative sample of 1245 adult Albertans through face-to face and telephone interviews conducted during February and March of 1990. Analyses of the ensuing data were completed in January 1991. This report provides a profile of AIDS in Alberta, describes the methods used to conduct the 1990 All Alberta Study and to analyse the survey data, and summarizes major findings obtained in response to each of the HIV/AIDS questionnaire items. Implications of the results for the development and implementation of public policy related to AIDS prevention, education, and care of persons with AIDS are identified whenever possible.

The results of the survey are organized and presented in four major sections. Section I addresses the estimated risk for acquisition of the AIDS virus (HIV) perceived among respondents as indicated by self reports of 'high risk' behaviours and self-assessed risk status. Section II describes the HIV/AIDS-related knowledge of the respondents with regard to their personal knowledge of a person with AIDS or the AIDS virus, and of HIV seroprevalence in relation to the proportion of AIDS cases in a population. Section III examines various attitudes toward testing of Albertans for the AIDS virus, including attitudes toward the compulsory testing of employees in the workplace, individual respondents' expectations of, and support for, personal testing for the AIDS virus, disclosure of the results of AIDS tests,

testing without the informed consent of individuals, and the identification of target groups in the general population as 'high priority' for AIDS testing. Section IV examines the attitudes of respondents toward persons with AIDS, and, in particular, addresses tendencies among respondents to blame the AIDS victim, to isolate uninfected children at school from contact with children with AIDS, and to support the provision of 'first class' health care for persons with AIDS. The Discussion draws together various findings of the survey, and identifies common themes and patterns of response evident in the data. Major implications of the survey results for future efforts directed toward the prevention, management, and control of AIDS in Alberta are also identified.

Appendix A contains the survey questionnaire items used in the study. Recommendations for future research on the HIV/AIDS-related knowledge, attitudes, and behaviours of Albertans are identified in Appendix B.

## **A Profile of AIDS in Alberta**

A profile of the development of AIDS in Alberta provides important background information for understanding the objectives, methods, and results of the 1990 All Alberta Study of the AIDS-related knowledge, attitudes, and behaviours of adult Albertans. This profile describes the prevalence of AIDS cases and deaths in Alberta since the first case was reported in 1983, identifies the general location of all cases from 1983 to the end of December 1990, highlights the geographical distribution of AIDS cases in Alberta during 1990, and summarizes the distribution of AIDS cases in terms of the risk factors most likely associated with transmission of the human immunodeficiency virus (HIV) to persons diagnosed with AIDS in this province.

### **Prevalence of AIDS Cases and Deaths in Alberta, to 1990 12**

As Table 1 indicates, the number of cases of AIDS in Alberta increased steadily from the time the first case was reported in 1983 until the end of 1989. However, the number of AIDS cases declined slightly during 1990. Similarly, the number of deaths due to AIDS increased steadily over the seven year period from 1983 to 1989, but there was almost no change in the number of AIDS-related deaths in 1990 compared to 1989 statistics. A total of 303 cases of AIDS were reported in Alberta from the beginning of 1983 to the end of December 1990, and males in the age range from 25 to 34 years have the highest prevalence of AIDS when all persons with AIDS in Alberta are categorized by age and gender.



**Table 1. AIDS Prevalence in Alberta, 1983 to 1990**

<u>Year Reported</u>	<u>Cases</u>	<u>Deaths</u>	<u>Cumulative Cases</u>
1983	1	1	1
1984	11	4	12
1985	13	10	25
1986	22	13	47
1987	41	27	88
1988	43	24	131
1989	89	44	220
1990	83	45	303

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### **Location of Cases**

The urban areas of Calgary and Edmonton accounted for almost 90% of all diagnosed and reported cases of AIDS in Alberta from 1983 to 1990. With reference to Table 2, the City of Calgary had approximately twice as many AIDS cases than did Edmonton, with Calgary reporting 59% of all AIDS cases during this period. Outside the two large urban centers, there were slightly more AIDS cases in the southern region of the province than there were in northern Alberta.

**Table 2. Location of AIDS Cases in Alberta, 1983 to 1990**

Calgary	179	(59%)
Edmonton	90	(30%)
Other Alberta (North)	15	(4.7%)
Other Alberta (South)	19	(6.3%)
<b>TOTAL</b>	<b>303</b>	<b>(100%)</b>

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Table 3 summarizes the location of new AIDS cases reported in Alberta during 1990.

**Table 3. Location of New AIDS Cases in Alberta, 1990**

<u>Location</u>	<u>No.</u>	<u>Percentage</u>
Calgary	46	(55.4%)
Edmonton	26	(31.3%)
Other Alberta (North)	4	( 4.8%)
Other Alberta (South)	7	( 8.4%)
<b>TOTAL</b>	<b>83</b>	<b>(99.9%)</b>

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## Risk Factors

The most likely risk factors for transmission of the human immunodeficiency virus among the AIDS cases reported in Alberta to the end of 1990 are given in Table 4.

**Table 4. Distribution of Total AIDS Cases in Alberta  
by Risk Group, to 1990**

Male Homosexual/Bisexual Activities	(86.5%)
Infection from Blood Products	(6.4%)
Heterosexual Relations	(2.6%)
Injection Drug Use	(1.9%)
Other or Unknown	(1.9%)
Pediatric Cases	(0.6%)
<b>TOTAL</b>	<b>270 (100%)</b>

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The vast majority (86.5%) of AIDS cases are attributed to unsafe sexual practices between homosexual or bisexual males and their partners, a situation which has encouraged AIDS prevention efforts among members of the gay communities in this province. Several of these persons also had injection drug abuse as a risk factor.

In 1985, the first case was reported of a blood recipient developing AIDS. Not all of the sixteen blood-related cases received blood in Alberta.

Since the fall of 1985, all blood donations in Alberta have been screened for the presence of antibody to HIV.

Eight (2.6%) cases of AIDS due to heterosexual relations were reported in Alberta by the end of December, 1990, and the number of such cases is expected to escalate. Injection drug use may also account for an increasing proportion of those infected with the HIV, although only 1.9% of cases were linked directly to injection drug use during the period from 1983 to December, 1990.

The two pediatric cases were reported in early 1984. Their parents were recent immigrants from a high-risk country. Both children have since died. While no further pediatric cases have been reported, further cases of AIDS among children may occur in children born to infected mothers.

In only six (1.9%) cases reported from 1983 to 1990 were the most likely routes of HIV transmission unknown.



### **Objectives**

This study of the AIDS-related knowledge, attitudes, and behaviours of a representative cross-section of Albertans was conducted for three primary reasons. Firstly, the results of the survey may be useful in estimating the extent of self-assessed risk for acquisition of the AIDS virus among the general population of Alberta, as indicated by respondents' self-reported behaviours and perceived chances of acquiring the AIDS virus. Secondly, responses to the knowledge questions may serve as indicators of the impact of AIDS education on the general public, and of the need for additional or alternative AIDS education messages. Thirdly, by assessing the attitudes of Albertans about certain AIDS-related issues such as compulsory AIDS testing and provision of health care services for persons with AIDS, public policy may be developed in the context of public opinion about these issues. Specific objectives of the study include the following:

1) To estimate the nature and extent of self-assessed risk for acquisition of the human immunodeficiency virus (HIV) and AIDS among a representative sample of Albertans as indicated by their responses to behavioural indicators of risk status and self-assessed chances of acquiring the AIDS virus.

2) To estimate the personal knowledge of a representative sample of Albertans with regard to

- i) persons with AIDS or the AIDS virus, and
- ii) HIV seroprevalence and the proportion of AIDS cases in a population.

- 3) To identify the attitudes of a representative sample of Albertans regarding various issues related to testing for the AIDS virus, including
  - i) mandatory AIDS testing of employees in the workplace
  - ii) support for personal AIDS testing
  - iii) disclosure of the results of AIDS tests
  - iv) AIDS testing without informed consent, and
  - v) target groups for AIDS testing.
  
- 4) To identify the attitudes of a representative sample of Albertans toward persons with AIDS, including
  - i) tendencies to agree or disagree that persons with AIDS 'deserve what they got' (i.e. AIDS)
  - ii) school attendance of children with those who have AIDS
  - iii) health care for persons with AIDS
  - iv) limits of expenditures on health care for persons with AIDS.
  
- 5) To identify the implications of the results of this survey for the development of public policy, programs and services for the general population and for persons with AIDS in Alberta.

### **Limitations of the Study**

The number and complexity of the AIDS-related questions included in the 1990 All Alberta Study were constrained by a need to limit the overall length of the survey questionnaire. Therefore, the depth of information obtained regarding any particular area of interest, such as AIDS testing, is limited. Further, the limited scope of questions included in this survey precludes a comprehensive view of all aspects of Albertans' knowledge, attitudes, and behaviours relevant to the development and implementation of provincial AIDS policies and programs.

The cross-sectional survey design used in this study means that information on changes over time in the AIDS-related knowledge, attitudes, and behaviours of adult Albertans is not available. However, these survey results do provide a baseline of information which may serve as a point of reference in comparisons of these results with those obtained in future AIDS research conducted among the general population of Alberta.

While the design and size of the survey sample (N=1,245) permits in many situations a detailed analysis of data obtained from all respondents, the small numbers of respondents self-identified as at higher risk for acquiring the AIDS virus prevent indepth analyses of the responses obtained from members of this subgroup. Thus, this survey may be most useful as an indicator of the AIDS-related knowledge, attitudes, and behaviours among the general population of adult Albertans. It does not provide detailed information about those members of the provincial population who appear to be at greater risk for acquisition of the AIDS virus.

Reliance on self-report data from respondents regarding their risk status for acquiring the AIDS virus, in the absence of objective criteria against which the opinions of respondents may be validated, means that the validity of this component of the data is uncertain. Further, individuals' responses to the survey questions may be compromised somewhat by difficulties in recalling certain information, in comprehending the meaning of survey questions, or by unwillingness to respond to sensitive questions about sexual behaviours, for example, or attitudes toward persons with AIDS. As the questions about HIV seroprevalence and the proportion of AIDS cases in a population require an understanding of the disease beyond a basic level of knowledge, some respondents may have had more difficulty in answering these questions.

Nonetheless, results of the 1990 All Alberta Study provide certain unique insights about the AIDS-related knowledge, attitudes, and behaviours of adult Albertans which have not previously been available. Viewed from the perspective of national AIDS surveys, such as that reported by Ornstein (1989), the results of this provincial study may also be placed within a Canadian context. In so doing, it is possible for the first time to identify commonalities and points of difference between Albertans and other Canadians with regard to certain aspects of their knowledge, attitudes, and behaviours relevant to the prevention, management, and control of AIDS.



## **II. METHODS**

### **Sampling Design: How Respondents Were Selected**

The main features of the sampling design are as follows:

1. The Province of Alberta was delineated into three areas:
  - a. The City of Edmonton for face-to-face interviewing.
  - b. The City of Calgary for telephone interviewing.
  - c. The remainder of the province ('Other Alberta') for telephone interviewing.
2. A two-stage selection process was used to obtain the survey sample.
  - a. First, households were selected for inclusion in the sample.
  - b. Next, a respondent within each household was selected.

### **Face-To -Face Sampling Procedure for the Edmonton Area**

The 1990 Edmonton population universe was designated as all persons 18 years of age or older who at the time of the study were living in a dwelling unit that was enumerated during the City of Edmonton Civic Census in the spring of 1989. To retain the comparability of the Edmonton face-to-face sample with previous Edmonton Area Studies (EAS), a sample size of 400 or more was deemed necessary. This sample size permitted Edmonton area data to be analyzed as a separate entity, as well as the Calgary and 'Other Alberta' areas.

The sampling frame consisted of a computerized list of addresses compiled by the City of Edmonton from their most current enumeration (1989). From the computer, a simple random sample of 620 addresses was selected for personal interviewing. Nursing homes, military bases, and temporary residences were deleted from the sample. Within the household, one eligible person was selected as the respondent for the one hour interview.

Interviewers were instructed to obtain an equal number of male and female respondents within their allotment of interviews. As adult males are generally more difficult to contact, the following selection procedure guidelines were established for the interviewers to assist them in obtaining their quotas:

- a. The dwelling unit must be the person's usual place of residence and he/she must be 18 years of age or older.
- b. If an adult male answers the door and is willing to be interviewed, he is the respondent.
- c. If an adult female answers the door and there is an adult male who is willing to be interviewed, then the male is to be interviewed. If the male is not willing to be interviewed, and the female is willing to do so, then the female is to be interviewed. <sup>4</sup>
- d. If an adult female answers the door and there is not an adult male present, then the female is requested to respond to the questionnaire.

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<sup>4</sup>Sixty percent of the first eligible persons encountered were female. In households where a completed interview was obtained, 88% of the first eligible persons agreed to participate in the survey.

The final gender composition of the Edmonton area sample obtained using these procedures was 49.6% male and 50.4% female.

### **Telephone Sampling Procedure for the Calgary and 'Other Alberta' Areas<sup>5</sup>**

The population universe designated for telephone interviewing was all persons 18 years of age or older who, at the time of the survey, were living in a dwelling unit in Alberta outside the City of Edmonton that could be contacted by means of direct dialing telephone services. From this population, two samples were drawn to represent the area: the first sample represented the City of Calgary and the second sample represented all other areas of Alberta outside of Edmonton and Calgary, respectively.

In previous studies conducted by the Population Research Laboratory, computer files of working five-digit telephone banks for all of Alberta were developed. The samples of telephone numbers for 'Calgary and 'Other Alberta' were generated from these files by selecting, with replacement, a simple random sample of banks for each area and appending a random number between 00 and 99 to each number selected. All duplicated numbers were discarded.

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<sup>5</sup>'Other Alberta' refers to all areas of the Province of Alberta outside of the City of Edmonton and The City of Calgary.

In accordance with the instructions given to face-to-face interviewers, the telephone interviewers were instructed to obtain an equal number of male and female respondents. Again, as adult males are generally more difficult to contact, the selection procedure guidelines were the same as for face-to-face interviews.

The final gender composition of the samples obtained for telephone interviewing using the above methods was 51.0% male and 49.0% female for the 'Other Alberta' area, and 50.4% male and 49.6% female for The City of Calgary.

### **Sample Characteristics**

A total of 1,245 individuals participated in the 1990 All Alberta Study and responded to the AIDS-related questions. The response rate by geographical area was 75.3% for Edmonton, 75.4% for Calgary, and 79.5% for the 'Other Alberta' regions, with 448 of respondents residing in Edmonton, 401 respondents residing in Calgary, and 396 respondents residing in other areas of Alberta. As the final sample obtained was not proportional in size to the Alberta population it represents, weighting of the sample was necessary in order to combine the sample to obtain a representative provincial sample. This procedure yielded a weighted sample of 317 persons from Edmonton, 349 persons from Calgary, and 579 persons from other areas of Alberta. The total weighted sample size was 1,245 persons.



When the total sample is classified by **gender**, 50.33% of respondents are male and 49.66% are female. The **age distribution** of the sample contains 22.9% of all respondents in the age range from 20 to 29 years, 30.6% in the range from 30 to 39 years, 19.4% in the range from 40 to 49 years, 12.3% in the range from 50 to 59 years, and 14.8 % aged 60 years of age or older. The **median age** in years for Edmonton and Calgary area respondents is 35 years, while 'Other Alberta' respondents have a median age of 41 years. Analysis of the **marital status** of respondents indicates that 71.3% of all respondents are married, while 16.2% are single, 7.4% are divorced, and 5.2% are widows or widowers.

Table 5 summarizes sample characteristics in terms of the location of residence, gender, marital status, age, and education of all respondents in the 1990 All Alberta Study.

**Table 5. Sample Characteristics (N = 1,245)**

Variable	n	%	Variable	n	%
1. Location: Edmonton	317	25.5	2. Sex: Male	628	50.5
Calgary	349	28.0	Female	617	49.5
Other	579	46.5			
3. Marital Status			4. Age yrs.:		
Single	219	17.6	18-29	309	24.8
Married	754	60.6	30-39	370	29.7
Common-law	75	6.0	40-54	301	24
Divorced	89	7.1	55+	259	20.9
Separated	46	3.7	Missing	6	0.5
Widowed	62	5.0			
5. Education:					
< High School	293	23.6			
High School	283	22.7			
Some Post HS	184	14.8			
Postsec.Degree	481	38.7			
Missing	40	0.3			

## **Design and Content of the Survey Questionnaires**

Two questionnaires were used in the study, one for the face-to-face component of data collection and one for the telephone interviews. All the telephone survey questions were taken from the face-to-face instrument and then modified slightly so that they were suitable for administration by telephone. No response categories or rating scales were altered in this process.

The questionnaires contained eleven questions which specifically addressed AIDS - related issues, knowledge, attitudes, and behaviours. A copy of the survey questions are contained in Appendix A of this report.

The survey questions were pre-tested on a total of sixty-seven Edmonton householders, and necessary modifications in the design of questions were made before the study was implemented across Alberta. All questions were also approved by a University of Alberta Ethics Committee prior to administration of the questionnaires to the public.

## **Data Collection Procedures**

### **1. Face-to Face Interviews in Edmonton**

Beginning on February 10, 1990 a total of 35 trained interviewers from the Population Research Laboratory interviewing pool conducted interviews of Edmonton area respondents. During the week prior to the

commencement of fieldwork, an introductory letter was sent to each selected address. The letter briefly described the nature of the study and advised the residents of the household that an interviewer would be visiting in the near future.

If the interviewers were unsuccessful in establishing contact on their first visit to a selected address, a maximum of four callback attempts were made before the address was declared a "non contact".

At the outset of each interview, the interviewer advised the respondent that his or her participation was voluntary, that responses would be kept completely confidential, and that the interview could be terminated at any time.

The data collection period spanned six weeks, with 60% of the interviews conducted during the first two weeks. The highest number of completed interviews occurred on Tuesdays, while the fewest interviews were completed on Fridays. On average, each interviewer completed 13 interviews. Twenty-five addresses were found to be ineligible as households as they referred to vacant or demolished buildings. Deletion of these addresses represented corrections to the sampling frame rather than non-response addresses.

Thirty-eight percent of the completed interviews were verified through a series of telephone checks and home visits. No significant discrepancies or irregularities in the responses were found as a result of these follow-up procedures.

## **2. Telephone Interviews**

Telephone interviewing began on February 12, 1990 and was completed in mid-March of that year. A total of twelve interviewers conducted this phase of the data collection.

If an interviewer was initially unsuccessful in establishing telephone contact with a pre-selected household, a maximum of ten callback attempts were permitted before the telephone number was declared a "no contact" number.

Upon establishing contact with a household, the interviewer identified herself, verified the telephone number reached, and asked screening questions for the selection of a respondent. Before administering the questionnaire, the interviewer advised the respondent that his or her participation was voluntary, that responses would be kept completely confidential, and that the interview could be terminated at any time.

The telephone data collection phase was conducted over a six week period, with 46% of the interviews completed during the first two weeks. On average, each telephone interviewer completed 66 interviews. Twenty-one percent of the completed interviews were verified by means of a follow-up telephone call to the respondent. No significant discrepancies or irregularities in the responses were found as a result of this follow-up procedure.



## **Data Analysis**

The raw data file exists in 80 column card image format and is stored on magnetic tape. The data were tabulated and cleaned in accordance with generally accepted survey research practices using OSIRIS and SPSSx statistical packages, as well as special data analysis programs developed by the Population Research Laboratory. The rectangular data set contains 390 variables for each case. There are a total of 1245 cases with 9 decks per case. A SPSSx system file with labels was created to analyze the data. In tabulating the data, the two questionnaires were coded in exactly the same manner to permit merging of the data without adjustments.

The independent variables used in data analyses include the age, gender, marital status, education, and location of residence of the respondents. These socio-demographic characteristics are assumed to influence the AIDS-related knowledge, attitudes, and behaviours of Albertans. In addition, two new independent variables, known as 'High Risk' and 'Risky Sex', were constructed as indicators of respondents' membership in a high risk group and tendencies to engage in risky sexual behaviours, respectively. A third new variable labelled 'Either Risk' combined responses to the variables 'High Risk' and 'Risky Sex'.

Data analyses were based on descriptive and basic inferential statistics. The chi-square statistic was used to determine the statistical

significance of observed differences among respondents with respect to particular independent and dependent variables.

All data analyses for this report were completed in January, 1991.

### III. RESULTS

#### Interpreting the Results of This Study

Several points should be considered when interpreting the results of this study. First, statistical significance alone -- the criterion by which it is determined whether an observed difference could have been the result of chance -- is not a sufficient guide to these data. With a sample of 1245 respondents, findings that reach statistical significance at conventional levels ( $p < .05$ ) are often too weak to form the basis for policy or program decisions. For this reason, the analysis attempts to focus more on the magnitudes of the difference among respondents along various dimensions of knowledge, attitudes, or behaviours, rather than on statistical significance (Cohen, 1990). When probability values are reported, 'p=' always refers to the probability of observing the relevant statistic by chance when there is no association between the two variables under consideration (for tests of chi-square, chi-square=0.0).

All missing data is omitted from the tables below (after presentation of Table 5). With the exception of Tables 8 & 9, tables are arranged with the classification (independent) variables across the top of the table and the dependent variable(s) displayed on the left side of the table. Comparisons of responses are therefore appropriately made across the tables or between categories of the independent, classification variables.

## **Section 1: Behavioural and Perceived Risks** **for HIV Infection and AIDS**

### **Introduction**

In 1987, Alberta's program for the prevention, management, and control of AIDS was published in the strategy document entitled "Education and Caring: Alberta's Program for the Prevention, Management, and Control of AIDS" (ACOH, 1987). This provincial program plan identifies education of the public about AIDS as the key to controlling the spread of the disease in this province, and states that "this will require that Albertans protect themselves and others by avoiding behaviours which allow the spread of the virus" (ACOH, 1987; 1). Accordingly, strategies identified for the prevention and control of AIDS in Alberta have two goals:

- (1) To increase the public's understanding of HIV infection and AIDS and encourage them to adopt lifestyles free of risk of infection and without fear, and
- (2) To prevent the spread of HIV infection.

If Albertans are to adopt lifestyles which reduce the likelihood of infection with the human immunodeficiency virus, they must perceive that the possibility of HIV infection is a real threat to their personal health and to those with whom they may engage in high risk behaviours for transmission of the HIV. However, very little is known about the extent to which Albertans may perceive themselves to be at risk for acquiring the AIDS virus and AIDS, and to what extent Albertans engage in risky behaviours

for HIV infection. This section provides some baseline information relevant to both of these areas of interest.

### **Indicators of Risk Status for HIV Infection and AIDS**

"High-risk" sexual activity has been the most common means of HIV infection in Alberta, as more than 85% of all AIDS cases reported in the province to December, 1990 were linked to unsafe sexual practices (refer to Table 4). However, complacency about AIDS has been a major problem among Albertans (ACOH, 1987;1), and many Albertans do not consider themselves to be at risk of acquiring the AIDS virus.

The extent to which members of a representative sample of Albertans currently consider themselves to be at risk for infection with the human immunodeficiency virus is, therefore, a central question in this study. Risk status is measured on the basis of respondents' answers to two indicators of self-assessed risk for infection with the AIDS virus: (1) participation in high risk behaviours and (2) perceived chances of being infected with the AIDS virus.

Respondents were classified as members of a 'High Risk' group if they responded affirmatively to questions about involvement in any one of five 'high risk' behaviours. That is, those who (1) used drugs by needle at any time since 1977 (except diabetics), (2) had haemophilia and received clotting factor concentrates since 1977, (3) were male and had sex with another male at any time since 1977, (4) had sex for money or drugs at any time



since 1977, or (5) since 1977, had been the sex partner of anyone who would answer 'yes' to any of the above, were classified as being at 'High Risk' for acquiring the AIDS virus.

Respondents are classified as engaging in sexual behaviours risky for HIV infection if they responded positively to the question: "In the last two years have you had at least one new sex partner?", and indicated that a condom was not always used with new sexual partners.

Each respondent also rated his or her chances for getting the AIDS virus as either 'high, medium, low, or none'. This measure provides an indication of the range of self-assessed risk for HIV infection among the 1,245 Albertans who participated in the study.

Finally, the extent to which respondents spontaneously identified AIDS as an important health or social issue was also considered as an indicator of the extent of concern about AIDS, or lack thereof, among the general population of the province.

## Location, Sex, Age, and Self-Reported AIDS Risk

Respondents' risks for acquiring the AIDS virus and AIDS, as indicated by their self-reports of 'high risk' behaviours, practice of risky sexual behaviours, and perceived chances of getting AIDS, are summarized in Table 6. The distribution of responses are displayed according to the location, sex, and age group of the 1,245 respondents.

**Table 6 Location, Sex, Age and Self-Reported AIDS Risk**

	Location			Sex		Age (years)			
	Ed	Calg	Other	Male	Female	18-29	30-39	40-54	55+
	<b>PERCENT</b>								
<b>High Risk Group 3.1%</b>	4.0	3.8	2.3	3.5	2.8	2.5	6.6	1.6	.8
	p=.260			p=.556		p=.000			
<b>Risky Sex 15.0%</b>	19.4	19.0	10.1	16.9	13.0	30.8	14.9	9.9	2.0
	p=.000			p=.067		p=.000			
<b>Either Risk 17.2%</b>	21.7	21.4	12.1	19.4	14.9	31.8	19.7	11.6	2.6
	p=.000			p=.046		p=.000			

### Perceived Chances of Getting AIDS

		Location			Sex		Age (years)			
		Ed	Calg	Other	Male	Female	18-29	30-39	40-54	55+
		<b>PERCENT</b>								
<b>Total</b>										
High	1.8	1.6	2.0	1.8	1.5	2.2	1.4	1.3	3.2	1.3
Med	5.1	4.8	6.6	4.4	4.2	6.0	5.5	6.3	5.3	2.7
Low	40.7	40.6	36.8	43.0	44.0	37.3	46.6	44.9	39.9	27.7
None	52.4	53.0	54.6	50.8	50.3	54.6	46.5	47.4	51.6	68.3
		p=.548			p=.067		p=.000			

Among the 1,245 respondents, only 3.1% identified themselves as satisfying at least one of the criteria for classification as "high risk" for HIV infection. However, 15% had engaged in risky sexual behaviour during the last two years, and 8.5% of the sample reported that they had two or more new sexual partners in the last two years without always using a condom. When both sources of risk are considered, 17.2 percent of the sample identified themselves as being at elevated risk for HIV infection. Yet only a small minority of the subjects evaluated their own chances of getting AIDS as appreciable: 1.8% thought it was 'high' and a further 5.1% thought it was 'medium'. While an additional 40.7 percent thought that their risk for getting AIDS was 'low', 52.4% thought that they had no risk of acquiring the disease. Clearly, many of those who reported one of the five high risk behaviours or 'risky sex' did not actually consider themselves to be at risk for HIV infection and AIDS.

Respondents in the younger age cohorts, particularly the 30-39 year olds, were most likely to identify themselves as falling in a high risk group (Table 6). This finding is in fact consistent with the age distribution of AIDS in Alberta and the identification of AIDS as "a young adult's disease" (ACOH, 1987; 4). Not surprisingly, risky sexual behaviour was much more likely to be reported by the youngest cohort, and the percentages of those engaging in risky sexual practices decreased markedly with increased age.

While a higher percentage of residents of Edmonton and Calgary placed themselves in a high risk group, location differences were not statistically significant and were small. However, reports of risky sexual behaviour

were almost twice as prevalent in Edmonton and Calgary than in other areas of the province, a finding consistent with the geographical distribution of AIDS cases in Alberta.

Gender differences in self-reports of high risk behaviours were not significant. Although men were more likely to report having two or more new sexual partners in the last two years and not always using a condom, gender differences here were not significant. But, when both bases of risk status were combined to yield the new variable labelled as 'Either Risk', a significant statistical difference between males and females was evident. Males generally appear at greater risk for acquiring the AIDS virus compared to the females in the study sample. However, the difference of 3.5% is not large.

No significant differences by location or gender were evident among respondents when they were asked about their perceived chances of getting AIDS. Some age-related differences were present, however, with older respondents more likely to perceive that they had lesser chances of getting AIDS. Given their lower reported risk of getting AIDS, this appears to be a reasonable perception. Overall, the relationship between age and perceived chances of getting AIDS is not particularly strong ( $\gamma = -.180$ ).

### **Marital Status, Education and Self-Reported AIDS Risk**

Table 7 extends the report of respondents' risks of acquiring the HIV and AIDS by examining relationships between their marital status,

education, and self-reports of high risk behaviours, risky sexual practices, and perceived chances of getting AIDS.

Considering marital status, it is evident that the relatively few divorced respondents in the sample are more than twice as likely to identify themselves as belonging to a high risk group (6.6%), followed by those who were never-married (5.6%). At the other extreme, none of the 62 widowed respondents identified themselves as being in a high risk group. Married and widowed respondents are very unlikely to report engaging in risky sexual practices, while about 38 to 44% of all the other marital statuses are fairly likely to have taken such risks. Not surprisingly, those who are classified as satisfying any high risk criteria follow the same pattern.

Education differences in risk are also significant. Those with at least some High School education are most likely to report membership in a high risk group. Those who have finished High School along with those with some High School education are more likely to report risky sexual behaviour. In general, the higher the educational level of the respondent, the lower the perceived risk. While this relationship was unlikely to have occurred by chance, it was not strong ( $\gamma = -.107$ ).

Despite their extreme under-representation in reported risk, widows are most likely to see their chances of getting AIDS as high. Still, the large majority (78.2%) of widows see that they have no chance of getting AIDS. Single (never-married), separated, and divorced respondents who are most likely to identify themselves as being 'at risk' (Table 6), are also more likely to rate their chance of getting AIDS as 'high' or 'medium'. Even then, the vast majority (over 80%) do not perceive an appreciable risk. This



emphasizes the importance of continued public education directed toward correcting this misperception. Only among the single did a large majority (64%) perceive any risk at all for developing AIDS.

**Table 7 Marital Status, Education and  
Self-Reported AIDS Risk**

	Marital Status						Education			
	NMar	Mar	CLaw	Div	Sep	Wid	<HS	HS	HS+	PSec
	PERCENT									
<b>High Risk Group 3.1%</b>	5.6	2.2	4.6	6.6	3.1	0.0	1.6	2.2	7.1	3.2
	p=.029						p=.006			
<b>Risky Sex 15.0%</b>	39.7	1.7	38.1	44.2	38.4	1.4	12.3	18.5	18.5	13.2
	p=.000						p=.058			
<b>Either Risk 17.2%</b>	42.2	4.1	39.3	47.5	38.4	1.4	13.2	21.3	23.2	15.0
	p=.000						p=.005			

**Perceived Chances of Getting AIDS**

	Marital Status						Education			
	NMar	Mar	CLaw	Div	Sep	Wid	<HS	HS	HS+	PSec
<u>Total</u>										
High	1.8	3.2	1.2	.9	1.0	3.2	5.7	0.8	3.5	1.3
Med	5.1	9.6	3.7	2.1	7.9	8.4	3.8	3.8	5.8	3.8
Low	40.7	51.2	38.6	45.0	48.1	39.7	12.3	35.7	36.5	47.9
None	52.4	36.1	56.5	51.9	43.0	48.7	78.2	56.9	54.2	46.9
	p=.000						p=.019			

## Self-Reported High Risk Status and Risky Sexual Behaviour

There is a positive association between the two different classifications of risk for HIV infection and AIDS. Those who identify themselves as being a member of at least one of the five 'High Risk' groups, on the basis of engaging in one or more risky behaviour for HIV infection, are also more likely to report risky sexual behaviour. Eighty-five percent (85%) of respondents who are not members of the 'High Risk' group also report that they have not engaged in risky sexual behaviours during the last two years. These statistically significant relationships are noted in Table 8.

**Table 8 Self-Reported High Risk Status and  
Risky Sexual Behaviour**

	Risky Sex		Total
	Yes	No	
	PERCENT		
High Risk Group	33.2	66.8	3.1
Not in High Risk Group	14.4	85.6	96.9
Total (p=.003)	15.0	85.0	N=1,216

However, those persons who belong to one of the five 'High Risk' groups for HIV infection are not more likely to see themselves as being at

greater risk for getting AIDS. As shown in Table 9, over one-third (35.2%) of those who report themselves to be 'at risk' also feel that they have no risk of getting AIDS. Only 10.7% assess their risk of getting AIDS as 'medium' or 'high'.

**Table 9 Self-Reported Risk Status and  
Perceived Chances of Getting AIDS**

	Perceived Chances of Getting AIDS			
	High	Medium	Low	None
Reported:	PERCENT			
1. High Risk	1.9	9.8	53.1	35.2
	p=.150			
Not High Risk	1.8	5.0	40.3	52.9
2. Risky Sex	1.2	12.4	56.6	29.9
	p=.000			
No Risky Sex	1.9	3.8	37.8	56.4
3. Either Risk (1 or 2)	1.7	11.1	56.3	30.9
	p=.000			
Neither Risk	1.8	3.9	37.4	56.9

Note: Table is percentaged across. Compare downwards.

Somewhat less discouraging is the finding that those who report engaging in risky sexual behaviour are somewhat more likely to perceive themselves to be at some risk. However, almost one in three (29.9%) of respondents who said they had at least one new sex partner in the last two years, and indicated that a condom was not always used with new sexual partners, felt that they had no risk of getting AIDS. Still only 13.6% of this high risk group reported that they believed their chances of contracting HIV were appreciable.

Although the behavioural indicators of AIDS risk and perceived chances of getting AIDS are strongly positively correlated ( $\gamma=.46$ ,  $p<.0000$ ), this correlation still suggests a gap between the actual risk of acquiring the HIV and the risks of HIV infection perceived among these Albertans.

### **New Sexual Partners and Condom Use**

AIDS prevention and educational campaigns emphasize the importance of using condoms as a means of reducing the chances of HIV infection. It is assumed that a positive relationship exists between the number of new sexual partners, lack of condom use, and increased risk for acquiring the AIDS virus. Analyses were therefore conducted to determine whether Albertans participating in this study attempt to reduce their chances of acquiring or spreading the HIV by using condoms when engaging in sexual intercourse with new partners.

As Table 10 indicates, only a small proportion (14.8%) of those who reported having new sexual partners in the last two years also indicated that they always used condoms. Only an additional 15.1% reported using condoms most of the time. Almost half (44.7%) of the 214 respondents who reported new sexual partners in the past two years reported that they never used condoms. Even among those who reported 4 or more sex partners in the last two years, less than one in five persons reported using a condom all the time.

**Table 10. New Sexual Partners and Condom Use**

Number of New Partners (last 2 yrs.)*	Condom Use				Total
	Always	Most	Some	Never	
	PERCENT				
1	15.8	9.2	22.0	53.0	42.5
2	13.9	11.6	21.7	52.8	23.4
3	9.5	25.4	37.1	28.0	14.0
4 or more	19.1	21.7	27.6	31.5	19.6
Total	14.8	15.1	25.4	44.7	N= 214
p=.102					

\* Note: Those with no new sexual partners in the last two years were omitted from the table.



## The Importance of AIDS as a Health and Social Issue

An unexpected, but interesting finding of the study was that 53 persons, or a little over 4% of the sample, volunteered that AIDS was one of the two most important issues facing Albertans today.<sup>6</sup> Those residing outside Edmonton were more likely to identify AIDS as an important health and social issue. In addition, AIDS was more likely to be an issue identified by females. There were no significant differences among respondents in this respect when they compared in terms of their age or marital status, but more highly educated respondents tended not to identify AIDS as important.

**Table 11 Location, Sex, and Age of Respondents  
Who Identified AIDS as an Important Issue (n=53)**

	Location			Sex		Age (yrs.)				
Ed	Calg	Other	Male	Female	18-29	30-39	40-54	55+		
PERCENTAGE OF TOTAL SAMPLE										
AIDS is NB Issue (4.3%)	2.0	4.2	5.6	2.6	6.0	6.0	3.9	2.5	5.5	
	p=.043			p=.004		p=.159				
	Marital Status					Education				
	NMar	Mar	CLaw	Div	Sep	Wid	<HS	HS	HS+	PSec
PERCENTAGE OF TOTAL SAMPLE										
AIDS Is NB Issue (4.3%)	4.4	3.6	10.4	3.4	4.7	6.1	5.7	6.7	1.2	3.2
	p=.129						p=.011			

<sup>6</sup>The economy, problems with government, and the environment headed the list.

The fact that 4.3% of the respondents spontaneously identify AIDS as an important issue may indicate that AIDS has a fairly high profile among Albertans. On the other hand, it is also possible that the problem of AIDS has declined in importance among residents of the province, and that the vast majority of Albertans direct little attention in their everyday lives to issues surrounding the prevention, management, and control of this disease. It is also possible that lack of concern about AIDS, as indicated by the small percentage of respondents who identified it as an important issue, may be linked to the negative findings about condom use, misinformation about HIV seroprevalence among high risk respondents, and the generally low levels of perceived risk of getting AIDS reported by most participants in this study. These possibilities deserve closer attention in future AIDS research projects conducted among the general population of adult Albertans.

## **Summary**

On the basis of self-reports of risky behaviours for transmission of the human immunodeficiency virus (HIV), about 17% of the 1,245 respondents to the 1990 All Alberta Study seem at 'high risk' for HIV infection.

However, only 1.8% rate their chances of getting AIDS as 'high', and a further 5.1% think it is 'medium'. More than 50% of these adult Albertans indicated they thought they had 'no chance' of acquiring the HIV or AIDS.

Among this survey sample, persons who engage in behaviours risky for HIV infection are not more likely to see themselves as being at greater risk for getting AIDS.

Respondents at greater risk for HIV infection, as suggested by their self-reports of risky behaviours, are somewhat less likely to be well-informed about the direct relationship between HIV seropositivity and the likelihood of developing AIDS.

While AIDS prevention messages encourage the use of condoms as a way to reduce chances for HIV infection, those who reported sexual behaviours risky for HIV infection were not more likely to use condoms.

A small minority (4.3%) of respondents identified AIDS as an important issue. This finding may indicate that AIDS has a fairly high profile among Albertans. Alternatively, it may reflect a general lack of concern about AIDS among the general population of the province, and the generally low levels of perceived risk for HIV infection and AIDS reported by the majority of these Albertans. Future surveys should follow-up on these possibilities, especially in terms of their implications for AIDS prevention and education.

## **Section 2. AIDS-Related Knowledge of Albertans**

### **Introduction**

This section addresses findings about the knowledge of Albertans in two distinct areas: (1) personal knowledge of a person who has AIDS or the AIDS virus, and (2) knowledge of the relationship between positive seroprevalence for the HIV and the likelihood of developing AIDS, as illustrated in the 'iceberg analogy' for seroprevalence described in Alberta's strategy document on the prevention, management and control of AIDS (ACOH, 1987;4-5).

Notably, there is a very weak relationship between the results in both of these areas of knowledge, with prior knowledge of a person with AIDS serving only to decrease the likelihood of respondents giving a 'don't know' response to either of the two knowledge questions on HIV infection and AIDS. It may be reasonable to assume that personal knowledge of a person with AIDS may have very little to do with one's understanding of the epidemiology of the disease among the general population.

### **Knowledge of Persons with AIDS**

The cumulative number of AIDS cases in Alberta had risen to 303 by the end of December, 1990, with most cases being reported in the urban centre of Calgary (refer to Table 2). Among the 1245 respondents in this study, 116 persons or 9.3% reported that they had personally known a person with AIDS or the AIDS virus. Consistent with the provincial profile of

the location of AIDS cases, Calgarians in this study are more likely to know someone with AIDS than are persons residing elsewhere in the province, as are persons with higher levels of education. However, females are no more likely than males to report that they personally know or have known a person with AIDS, and there are no differences by age group or marital status in this respect.

**Table 12. Knowing a Person with AIDS, Identifying AIDS as an Issue, and Perceived Chances of Getting AIDS**

		Perceived Chances of Getting AIDS			
		High	Medium	Low	None
		PERCENT			
Know Person with AIDS	Yes(9.3%)	7.0	7.5	42.6	42.8
	No(90.7%)	1.3	4.9	40.5	53.4
		p=.000			
AIDS is NB Issue	Yes(4.3%)	1.6	5.1	40.7	52.6
	No(95.7%)	7.1	5.7	40.3	46.9
		p=.029			

As Table 12 shows, respondents who personally know or have known a person with AIDS are much more likely to think they might get AIDS. Even so, only 14.5% of those who reported knowing someone with AIDS rated their own risk of getting AIDS as 'medium' or 'high'. Interestingly, as perceived chances of getting AIDS increased, respondents were less likely to



identify AIDS as an important health or social issue. Of course, it should be noted in the latter case that only 4.3% of the total sample identified AIDS as an important issue.

### **Knowledge of HIV Seroprevalence and AIDS**

Full-blown cases of AIDS represent only the 'tip of the iceberg' of those infected with the human immunodeficiency virus (HIV). Most people who are HIV positive appear well and have no symptoms or signs of illness. A somewhat smaller proportion of those with HIV infection will have general signs and symptoms.

At any point in time, only a minority of all persons who are HIV positive will appear to be sick and will be diagnosed as having acquired immune deficiency syndrome (AIDS). As of December, 1990, the true magnitude of the HIV seroprevalence in Alberta is estimated to be between 4,545 and 7,575 people, based on the Federal Center for AIDS estimate that in Canada the number of persons infected is 15 to 25 times the cases of AIDS.<sup>7</sup>

It is of interest, therefore, to ascertain Albertans' levels of understanding of the relationships between HIV infection, the likelihood of

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<sup>7</sup>The cumulative number of cases of AIDS (N=303) to December, 1990, was used to estimate HIV seroprevalence in the Alberta population at that point in time.

developing AIDS, and the likelihood of actually becoming sick with AIDS. Such information extends beyond an 'academic' interest in the AIDS-related knowledge among the general population of the province, for such information has implications for AIDS prevention and educational campaigns among respondents. Such knowledge, or lack thereof, may influence perceived chances of getting AIDS and the likelihood that persons will engage in behaviours involving greater risks for HIV infection. To the extent that AIDS education programs have emphasized the 'iceberg' analogy for the relationship between HIV seroprevalence rates and diagnosed AIDS cases, or have otherwise attempted to communicate this message, the results of this survey may be used as an indicator of the effectiveness of such educational efforts.

Two questions were used to measure respondents' knowledge about HIV seroprevalence and AIDS. The first question asked, "In your estimation, what percentage of people who now have the AIDS virus will eventually get sick with AIDS? The five possible responses were: 'less than 10%', '10 to 49%', '50 to 89%', '90 to 100%', and 'don't know'. The best answer to the question is '50 to 89%', but an answer of '90-100%' also indicates that the respondent was correctly informed. The choice of either response category indicating a probability below 50% indicates the respondent is misinformed

About thirty five percent of respondents chose the best answer, and a further 20.9% said that '90 to 100%' of those persons who have the AIDS virus will eventually get sick with AIDS. Slightly less than one in four (24.5%) gave incorrect answers, while 18.9% said they did not know the answer to this question. On balance, the proportion of respondents who

appeared familiar with the relationships between positive HIV seroprevalence and the likelihood of developing AIDS only slightly exceeds the proportion of those who are misinformed or uninformed in this area. This finding suggests that almost half of the general population in Alberta are unaware that there is a strong positive relationship between infection with the AIDS virus and development of AIDS. This lack of information may, in turn, lessen perceived personal risks of developing AIDS. In addition, many members of the public may underestimate the future magnitude of the AIDS epidemic in this province.

The second question asks respondents to estimate "how many of those who now have the AIDS virus are now sick with AIDS". The best answer to this question is 'less than 10%', the 'tip of the iceberg'. A response of '10-49%' is also considered correct, while the choice of either category over 50% indicates misinformation. Twenty-one percent of the respondents said that they did not know the answer to this question.

In contrast to the response pattern for the first knowledge question about HIV seroprevalence and AIDS, a somewhat smaller percentage got this question right (50%). As Table 13 indicates, those that answered "don't know" to one question were likely to do so to the other. Somewhat surprisingly, many of those who answered the second question right had the first question wrong. Indeed, when the two questions are coded ordinally as in Table 13, there is actually a negative relationship ( $\gamma = -.200$ ) between the two variables. This reinforces the conclusion that few respondents are well-informed about the spread of AIDS. Only 2.4% of the respondents gave

the best answer to both questions and only 29.3% gave an acceptable answer to both.

**Table 13. Knowledge of HIV Seroprevalence and AIDS**

		How Many of Those Who Now Have the AIDS Virus Are Now Sick with AIDS?					Total
		Worst	Wrong	<u>Answer</u> D.K.	O.K.	Best	
How Many of Those Who Have the AIDS Virus Will Eventually Get Sick with AIDS?	<u>Answer</u>	PERCENT p=.000					
	Worst	3.4	0.8	2.8	2.3	18.2	3.9
	Wrong	8.5	12.3	7.6	27.9	42.6	20.6
	D.K.	2.2	3.1	76.7	2.4	9.3	18.9
	O.K.	53.8	34.8	8.2	18.5	9.0	20.9
	Best	32.2	49.0	4.7	48.9	20.9	35.6
	Total	5.1	24.0	21.0	38.5	11.5	N=1,242

### **Sociodemographic Characteristics and AIDS-Related Knowledge**

As Table 14 indicates, Calgarians are most likely (41.2%) to know that most people infected with the AIDS virus will eventually get sick with AIDS. However, this finding did not hold true for the question dealing with those now sick; no significant differences in this aspect of AIDS information was evident among respondents when they were classified by their location in the province.

Table 14. Location, Sex, Age and Knowledge

		Location			Sex		Age (yrs.)			
		Ed	Calg	Other	Male	Female	18-29	30-39	40-54	55+
PERCENT										
Know % get Sick	Mis-	27.3	19.8	25.8	26.4	22.5	30.8	25.3	21.1	20.0
	info.									
	D.K.	16.3	18.8	20.5	16.2	21.6	9.0	15.2	18.0	36.8
	O.K.	24.8	20.3	19.2	22.1	19.7	20.9	24.0	23.5	13.5
	Best	31.5	41.2	34.4	35.3	35.9	39.3	35.4	37.5	29.8
		p=.012			p=.022		p=.000			
Know % now Sick	Mis-	31.5	27.0	28.9	28.8	29.2	34.2	30.5	28.5	22.0
	info.									
	D.K.	19.0	19.0	23.3	18.4	23.7	9.8	15.6	21.2	40.6
	O.K.	35.8	44.0	36.7	39.2	37.9	45.4	42.3	36.3	27.9
	Best	13.6	10.0	11.1	13.6	9.3	10.6	11.7	14.0	9.6
		p=.053			p=.056		p=.000			

Gender differences are slight regarding knowledge of HIV seroprevalence and the likelihood of getting AIDS. Age differences are significant, however, a factor which may be related to the level of education held among different age cohorts. The youngest respondents (aged 18 to 29 years) are most likely to be misinformed about the direct relationship between HIV infection and the likelihood of getting AIDS, although those in this age group are also most likely to give the best answer to the question about the likelihood of getting sick with AIDS. This lack of accurate information on the part of the youngest cohort is disturbing, since they may



well be at greater risk of HIV infection and have been the specific target of AIDS educational campaigns.

Persons in the oldest age category, 55 years of age or older, are most likely to state that they 'don't know' the answers to these questions. Notably, it is primarily the responses of this older cohort which create the age differences observed in Table 14.

**Table 15. Marital Status, Education and Knowledge about AIDS**

		Marital Status						Education			
		NMar	Mar	CLaw	Div	Sep	Wid	<HS	HS	HS+	PSec
Know	Mis-										
% get	info.	27.5	24.1	32.7	24.8	25.7	6.5	22.0	29.7	19.9	24.9
Sick											
	D.K.	10.1	19.8	12.1	23.8	15.1	45.1	26.7	20.8	10.9	16.1
	O.K.	21.1	20.6	22.9	23.1	22.5	17.6	15.9	17.4	30.1	22.8
	Best	41.3	35.5	32.3	28.3	36.7	30.8	35.3	32.2	39.2	36.4
				p=.000						p=.000	
Know	Mis-										
% now	info.	32.6	26.8	46.4	30.5	22.8	24.7	33.6	31.2	29.1	24.9
Sick											
	D.K.	10.4	22.5	13.1	26.2	14.7	48.3	31.2	24.0	9.3	17.3
	O.K.	43.0	39.8	29.7	28.0	46.6	27.0	26.9	32.3	47.2	46.2
	Best	14.0	11.0	10.8	15.3	15.9	0.0	8.3	12.5	14.4	11.6
				p=.000						0=.000	

\*Note: Misinformation (Mis-info) includes both incorrect answers. For the knowledge question about the % who will eventually get sick with AIDS, misinformed answers were 49% or lower. For the % now sick with AIDS (of those with the HIV), misinformed answers were 50% or higher.

With reference to Table 15, significant differences in knowledge about AIDS are evident when respondents are classified by marital status. While there were significant knowledge differences by education, there is little pattern to those differences. Those with higher levels of education are not particularly more likely to get the answers systematically wrong or right, although those with higher levels of education are more likely to say that they 'don't know'. It appears that lack of information about HIV seroprevalence is relatively evenly distributed across different segments of the Alberta population.

### **Self-Reported AIDS Risk and Knowledge of HIV Seroprevalence**

A further question addressed in the study was whether respondents' knowledge of the seroprevalence of the HIV and the proportion of AIDS cases in a population was related to risk status for HIV infection and AIDS. Table 16 provides some tentative support for the presence of such a relationship, particularly with regard to the likelihood of a respondent giving a 'don't know' response to either survey question on HIV seroprevalence and the likelihood of being sick, or getting sick, because of AIDS. However, the relationship is not strong, and the observed differences in knowledge do not indicate that those at greater risk for HIV infection/AIDS are better informed about HIV seroprevalence.

Respondents identified as at relatively higher risk for acquiring the HIV and AIDS were also somewhat more likely to give a wrong answer to the knowledge questions about HIV infection and AIDS. This suggests that the persons who are at greater risk for HIV infection are actually somewhat

less likely to be informed about the relationships between HIV infection and the likelihood of developing AIDS.

**Table 16. Self-Reported AIDS Risk and Knowledge of HIV Seroprevalence**

		AIDS Risk*	
		High Risk	Low Risk
		PERCENT	
Know % get Sick	Mis- info.	36.0	27.5
	D.K.	13.7	22.5
	O.K.	38.2	38.6
	Best	12.1	11.3
		p=.025	
Know % Now Sick	Mis- info.		
	D.K.	11.7	20.4
	O.K.	23.2	20.5
	Best	34.9	35.8
		p=.024	

## Summary

Personal knowledge of a person with AIDS seems unrelated to knowledge about HIV seropositivity and the prevalence of AIDS in the Canadian population.

Almost 10% of all respondents stated that they personally knew, or had known, a person with AIDS.

Consistent with the geographical profile of AIDS cases in Alberta, Calgarians in this study were more likely to know, or have known, a person with AIDS.

Those who personally knew, or have known, a person with AIDS were more likely to rate their chances of getting AIDS as 'high' or 'medium'.

Almost half of all respondents were misinformed or uninformed about the strong positive relationship between HIV seropositivity and the likelihood of developing AIDS. This lack of accurate information may lessen perceived personal risks of developing AIDS, and may encourage the public to underestimate the potential size of the AIDS epidemic in this province.

Young adults in the age range from 20 to 29 years were most likely to be misinformed about the direct relationship between HIV seropositivity and the likelihood of getting AIDS.

Persons aged 55+ years were most likely to state that they did not know the answers to questions about HIV/AIDS seroprevalence in the population.

There were some differences in levels of knowledge according to the marital status and education of respondents, but no consistent pattern to these differences emerged from the data.

Respondents identified as at relatively higher risk for acquiring the HIV and AIDS were also somewhat more likely to give a wrong answer to the knowledge questions about HIV infection and AIDS. This suggests that the persons who are at greater risk for HIV infection are actually somewhat less likely to be informed about the relationships between HIV infection and the likelihood of developing AIDS.



### **Section 3. Attitudes toward AIDS Testing**

#### **Introduction**

There are many complex medical, legal, and ethical issues related to the testing of individuals for HIV seropositivity. The Alberta AIDS program has emphasized that informed consent for AIDS testing should always be obtained and that test results should be held in confidence (ACOH, 1987; 24).

Mandatory screening of any group is not currently supported by the provincial government. The rationale for this policy position is described in Alberta's strategic document on AIDS:

"Mandatory screening for AIDS has not been shown to significantly reduce the spread of the virus, and **cannot** prevent AIDS. It can be enormously expensive, and have severe detrimental effects from false positive test results, which occur particularly frequently in groups with low rates of infection. Resources are more effective if spent on education and on making voluntary testing readily available for those at risk..."  
(Alberta Community & Occupational Health, 1987;25).

However, the extent to which Albertans support the provincial position on the testing of individuals for HIV seroprevalence has been uncertain. Therefore, one of the objectives of the 1990 All Alberta Study was to identify the attitudes of a representative sample of Albertans regarding various issues related to testing for the AIDS virus, including mandatory AIDS testing of employees in the workplace, support for personal AIDS

testing, disclosure of the results of AIDS tests, AIDS testing without informed consent, and target groups for AIDS testing.

Responses to each of these public policy issues are addressed in this section of the report. In general, Albertans' attitudes toward AIDS testing are somewhat inconsistent with the policy position on previously taken by the provincial government on the subject of testing for HIV seropositivity. There are, nonetheless, some statistically significant differences among respondents regarding particular issues when data analyses take into consideration variations in the socio-demographic characteristics of the sample.

### **Mandatory AIDS Testing of Employees in the Workplace**

The 1245 Albertans who participated in the study were asked to state their opinion on the statement that "Employers should have the right to require an employee to be tested for the AIDS virus". Possible response categories were 'strongly agree', 'agree', 'disagree', or 'strongly disagree'. This questionnaire item placed the issue of mandatory AIDS testing within the context of the workplace, and was intended to gauge public support, or lack thereof, for employers' rights to require testing of employees for HIV seropositivity.

In contrast to the lack of support for mandatory testing identified in Alberta's strategic document on the prevention, control and management of AIDS (ACOH, 1987), slightly more than half of the respondents (55.3%) in this study indicated that they agreed that employers should have the right to

require an employee to be tested for the AIDS virus. Notably, the extent of support for mandatory testing found here is greater than that reported by Northcott and Reutter (1989;6), who found in 1989 that 37.2% of a representative sample of 443 adult Edmontonians agreed that "employers should have the right to require that an employee be tested". Still, it should be noted that a large minority are opposed to employers having the right to require that an employee be tested for HIV seropositivity. It also may be that case that many Albertans are unaware of the reasons behind the provincial AIDS policy on mandatory testing.

**Table 17. Location, Sex, Age, and Attitudes toward AIDS Testing**

	Location			Sex		Age (yrs. )			
	Ed	Cal	Other	Male	Female	18-29	30-39	40-54	55+
	PERCENT								
Agree to Mandatory Testing (55.3%)	52.6	50.0	60.1	57.3	53.2	42.9	47.8	49.1	76.8
	p=.000			p=.197		p=.000			
Testing without Consent (26.2%)	27.3	24.7	26.4	29.7	22.5	21.1	24.8	25.8	35.6
	p=.747			p=.006		p=.002			

When the socio-demographic characteristics of respondents who support mandatory testing are considered, it is evident that such support is more prevalent in areas of Alberta outside the two big cities (Table 17). That

is, residents of Calgary and Edmonton are less likely to be in favour of an employer having the right to require an employee to be tested for HIV seropositivity.

Respondents in the oldest age group (55+) are much more likely to be in favour of employer testing. The widowed and married respondents are more likely to agree with employer testing, as are those with less than high school education (Table 18). It is possible that those respondents who are less likely to be employed are more likely to be supportive of mandatory testing of employees. Further, those who consider themselves to be at lower risk for HIV infection and AIDS are more supportive of mandatory testing of employees (Table 20).

**Table 18 Marital Status, Education and Attitudes  
toward AIDS Testing**

	Marital Status						Education			
	NMar	Mar	CLaw	Div	Sep	Wid	<HS	HS	HS+	PSec
	PERCENT									
Agree to Mandatory Testing	44.8	58.6	45.0	47.7	49.4	82.4	63.8	55.2	45.0	53.7
	p=.000						p=.027			
Testing without Consent	24.4	26.3	23.4	32.7	23.5	27.3	35.4	25.8	22.8	22.3
	p=.758						p=.001			

Who is not generally supportive of employers' rights to require AIDS testing of employees? Interestingly, among those few respondents (4.3%) who identify AIDS as one of the top two issues facing Albertans, there is less support for testing of employees for the AIDS virus. Also, as indicated in Table 20, those who report that they personally know a person with AIDS (9.6% of the sample) are somewhat less likely to favour employer testing (47.6% agreed as opposed to 56.1% agree among those who did not know a person with AIDS). There were no significant gender differences in attitudes toward mandatory testing of employees for the AIDS virus, just as there were no significant gender differences in the probability a respondent knew or had known a person with AIDS.

### **Personal Expectations for AIDS Testing**

The majority of Albertans interviewed were supportive of the mandatory testing of employees upon request by an employer, and one in ten (9.7%) expected that they personally would be tested for HIV seropositivity in the next 12 months. Males were no more likely to expect to be tested during the coming year than were females, and differences between locations and levels of education were not significant.

Among those who did expect to be tested for the AIDS virus, single (15.3%) and divorced respondents (13.0%) were somewhat more likely than others to report that they expected to be tested. Further, and more importantly, persons who appear to be at 'High Risk' for HIV infection, those who state that they knew or had known a person with AIDS, and those who



perceive their chances of getting AIDS to be greater are more likely to expect to be tested for the AIDS virus in the next twelve months (Table 20). Personal expectations for AIDS testing appear closely related to self-reported status for HIV infection and AIDS.

### **Support for AIDS Testing**

Respondents were asked to indicate whether, if selected to be part of a national sample of people and given assurances of privacy of test results, they would agree to have their blood tested for the AIDS virus. Fully 88.8% of the respondents to this question indicated that they would agree to an AIDS test if selected in such a study .

There were no differences by sex, location or age in these responses, and there were no differences in volunteering by reported AIDS risk or by AIDS knowledge. Those with higher education were slightly more likely than others to respond affirmatively, and widowed respondents (i.e. those with the lowest perceived chances of getting AIDS), were slightly less likely to indicate that they would volunteer for the test.

Interestingly, those who say they would volunteer for the AIDS test tend to express more positive attitudes toward employer rights to require AIDS testing of employees (Table 19).

These results suggest that Albertans may be quite willing to participate in AIDS testing under assurances of confidentiality of test results,

and that should random testing be attempted in a study, refusals to participate would probably not bias the results.

**Table 19. Support for AIDS Testing of Self**  
**Attitudes toward Mandatory Testing of Employees**

Attitudes Toward Mandatory Testing	If Selected Would		p
	Have Test	Would Not	
	PERCENT		
Strongly Agree	20.3	13.1	
Agree	35.9	35.3	
Disagree	29.3	24.6	
Strongly Disagree	14.5	27.0	.002

### **Disclosure of the Results of AIDS Testing**

Respondents were also asked if they would insist on knowing the results of their AIDS tests if they volunteered to be tested in a national study of the prevalence of the AIDS virus in the country. Fully 90.8% of the Albertans in this study indicated they would want to know the results of their AIDS tests. This high level of insistence on disclosure of the results of HIV seropositivity to the individual tested did not differ significantly among respondents by perceived AIDS risk or socio-demographic factors.

## **AIDS Testing without Informed Consent**

The ethical and legal issue of informed consent was addressed in the 1990 All Alberta Study by asking respondents, "Should people's blood be tested for the AIDS virus without their knowledge it was being done?" The vast majority of the sample (73.8%) supported the position taken by the Alberta government in support of informed consent by individuals for AIDS testing.

As shown in Table 17, there were no significant location differences in attitudes toward "testing without their knowledge". However, males are somewhat more likely to favour testing without informed consent, as are respondents in the oldest age group (55+) and those who have less than a high school education.

The marital status of respondents does not appear to exert a significant influence on whether they support AIDS testing in the absence of informed consent (Table 18). Persons in different risk categories for HIV infection and AIDS are no more or less in agreement on the issue of informed consent, and there are no significant difference among respondents on the basis of their perceived chances of getting the AIDS virus. Knowing a person with AIDS at any time does not seem to influence respondents' views on whether people's blood should be tested for the AIDS virus without their knowledge it is being done. These latter findings are reported in Table 20.

**Table 20 Self-Reported AIDS Risk, Knowledge of a Person with AIDS, and Attitudes toward AIDS Testing**

	Reported Risk		Know Person with AIDS		Chance of Getting AIDS			
	Low	High	Yes	No	High	Med	Low	None
PERCENT								
Agree to Mandatory Testing	52.7	46.4	46.9	56.1	67.1	58.3	52.5	56.0
	p=.018		p=.000		p=.032			
Testing without Consent	25.6	29.0	22.3	26.5	21.0	26.0	24.7	27.5
	p=.358		p=.080		p=.725			
Expect to be Tested (9.7%)	8.7	16.0	17.5	9.0	37.2	16.2	13.0	5.9
	p=.002		p=.000		p=.000			

### Target Groups for AIDS Testing

Given the opportunity to select from a list of potential target groups those who should be tested for HIV seropositivity, even if those selected did not give consent for AIDS testing, the 1,245 participants in this study most often selected "blood and organ donors" as target groups for AIDS testing. Indeed, 92.1% of respondents stated these donors should be tested for AIDS "even if they do not give consent".

As Table 21 indicates, the next most frequently cited groups were prostitutes (73.2%), injection drug users (71.3%), blood recipients (68.9%),

health workers (62.6%), homosexual men (60.2%), bisexual men (59.4%), hospital patients (57.8%), and members of the military and airline pilots (36.2%).

**Table 21. Target Groups for AIDS Testing**

Who Should be Tested?	<u>Total</u>	<u>PERCENT AGREE</u>		
Health Workers	62.6	66.7	49.8	.000
Blood Recipients	68.9	72.7	59.3	.000
Blood and Organ Donors	92.1	94.1	89.5	.062
Hospital Patients	57.8	62.6	47.6	.002
Military Pilots	36.2	40.4	22.8	.000
Homosexual Men	60.2	62.3	61.7	.970
Bisexual Men	59.4	61.9	59.3	.638
Prostitutes	73.2	75.2	72.7	.613
Injection Drug Users	71.3	74.1	66.9	.102

These findings are quite different from those reported in The Alberta AIDS Survey (Quality Control Research, 1987), when only 5% of respondents indicated that blood donors should be mandatorily tested for HIV seropositivity, and the most frequently cited target group for mandatory testing was that composed of homosexuals (mentioned by 49% of survey respondents). Further comparisons of results of the 1987 Alberta AIDS Survey and responses obtained in the 1990 All Alberta Study suggest that



support for testing all types of target groups has generally increased among Albertans.<sup>8</sup>

Those who said that they would volunteer for the AIDS test if selected to participate in a national study of AIDS were more likely to agree to the propriety of mandatory tests for health workers, blood recipients, hospital patients, and members of the military and commercial airline pilots. However, those who were personally willing to be tested were not more likely to think that high risk groups (e.g. homosexual and bisexual males; injection drug users) should be tested; they were actually more supportive of testing of members of target groups considered to be at lower risk for transmission of the HIV. These attitudes clearly suggest that the public needs to be better informed about the routes for HIV transmission and the indicators for HIV seropositivity testing.

## Summary

More than half (55.3%) of the respondents in this study agreed that employers should have the right to require an employee to be tested for HIV seropositivity.

Support for mandatory testing of employees in the workplace is greater in regions outside of Edmonton and Calgary, and among those who

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<sup>8</sup>In 1987, target groups identified for mandatory AIDS testing were homosexuals (mentioned by 49% of those surveyed), prostitutes (18%), drug users (17%), health care workers (12%), I. V. drug users (10%), promiscuous individuals (8%), persons getting married (6%), recipients of blood transfusions (5%), sexually active individuals (5%), high risk groups (5%), blood donors (5%), bisexuals (4%), others (23%).

are aged 55+ years, are married or widowed, have less than a high school education, or think that their personal chances of getting AIDS are low.

Although the majority of Albertans interviewed were supportive of mandatory testing of employees, less than one in ten (9.7%) personally expected to be tested for HIV seropositivity in the next 12 months.

Those more likely to expect personal testing for the AIDS virus in the 12 months were respondents classified as 'High Risk' for HIV infection, those who knew or had known a person with AIDS, and those who perceived their chances of getting AIDS as higher.

Given assurances of the confidentiality of test results, 88.8% of the Albertans in this study said they would agree to have their blood tested for the AIDS virus.

Fully 90.8% of all respondents stated they would insist on knowing the results of their AIDS tests if they volunteered to be tested in a national study of the prevalence of the AIDS virus in the Canadian population.

Slightly more than one quarter (26.2%) answered 'yes' to the question, "Should people's blood be tested for the AIDS virus without their knowledge it was being done?"

When classified according to sociodemographic characteristics, persons more in support of AIDS testing without informed consent were males, those aged 55+ years, or those who had less than a high school education.

Blood and organ donors were most often identified (92.1%) as a target group for HIV seropositivity tests, 'even if they do not give consent'. The next most frequently cited groups were prostitutes (73.2%), injection drug users (71.3%), blood recipients (68.9%), health workers (62.6%), homosexual men (60.2%), bisexual men (59.4%), hospital patients (57.8%), and members of the military and airline pilots (36.2%).

## **Section 4. Attitudes toward Persons with AIDS**

### **Introduction**

Attitudes toward persons with AIDS, whether characterized as positive, negative, or indifferent in nature, may influence how individuals respond to the real and perceived threats of HIV infection and how willing they are to interact on any basis with those who are HIV seropositive. Furthermore, the priority that the public places on programs and services for persons with AIDS may be affected by attitudes held toward members of this group in society. Accordingly, the 1990 All Alberta Study attempted to assess the nature of selected attitudes prevalent among a representative sample of the adult population, as they related to three primary areas: (1) tendencies to agree or disagree that the victim of AIDS 'deserved what they got' (ie. the disease); (2) likelihood of removing one's children from school if a child with AIDS was to attend that school; and (3) support for the provision of 'first class health care' for persons with AIDS, irrespective of the financial costs of this care.

This section of the report summarizes the major findings arising from interviews of Albertans about these subjects. Overall, Albertans do not appear to hold negative attitudes toward persons with AIDS. They are not likely to favour isolation of children with AIDS from other school children, nor are they likely to deny the best possible health care services for persons diagnosed with acquired immune deficiency syndrome.

## Tolerance of Persons with AIDS

Respondents were asked to indicate how much they agreed or disagreed with the statement, "Most AIDS victims deserve what they got" (i.e. the AIDS disease). A high level of disagreement with this statement, indicating that most Albertans in this study do not tend to blame the victim of AIDS, was obtained. Among the 1,245 Albertans interviewed, 61.6% expressed disagreement with this statement, while only a small minority (16.1%) agreed or strongly agreed that most persons with AIDS "deserve what they got."

**Table 22. Location, Sex, Age and  
"Blaming the Victim" of AIDS**

	Location			Sex		Age (yrs. )			
	Ed	Calg	Other	Male	Female	18-29	30-39	40-54	55+
<hr/>									
PERCENT									
Most AIDS victims deserve what they got.									
Disagree* (61.6%)	61.8	68.7	57.2	57.1	65.3	64.2	68.9	63.7	44.8
Agree (16.1%)	17.8	13.7	16.8	19.2	13.2	11.7	12.2	17.0	27.5
	p=.004			p=.000		p=.000			

\*Positive attitudes toward persons with AIDS include the two most categories on the seven point scale ('strongly disagree' and 'disagree').

Table 22 shows that there were no large location differences in attitudes towards AIDS victims, although non-urban residents were



somewhat less likely to feel that most AIDS victims got what they deserved. Generally, females had somewhat more positive attitudes towards AIDS victims than did males, and younger respondents had more favourable attitudes than older respondents. Table 26 notes that there were not significant differences by marital status, but that those with higher levels of education tended to be more positive in their attitudes toward persons with AIDS. However, these patterns were not strong.

Interestingly, respondents classified as 'High Risk' for HIV infection were more likely to agree that "most AIDS victims deserve what they got." Given that few of those who reported behaviours that placed them at greater risk for HIV infection also perceived themselves be at 'high' risk for getting AIDS, this is probably not a case of (possible) victims blaming themselves. Rather, this negative attitude towards persons with AIDS may well be based on a lack of knowledge about HIV/AIDS. Further, if a respondent knew or had known a person with AIDS, there was significantly less likelihood of "blaming the victim" of AIDS. Those who rated their chances of getting the AIDS virus as 'high' or 'medium' were also much less likely to blame AIDS victims for getting the disease. These findings are summarized in Table 27.

### **School Attendance of Children**

Respondents' agreement or disagreement with the statement, "If a child with AIDS were to attend my child's school, I would take my child out of the school" provides a second indication of attitudes held by Albertans toward persons with AIDS. About seventy-three percent of all respondents

indicated disagreement with this statement, suggesting that there is not a high level of intolerance in this province for school attendance of children with AIDS. Non-urban residents are more likely to disagree with removing their children from school if a child with AIDS attended that school, while persons with higher levels of education were also less likely to do so.

**Table 23. Location, Sex, Age and  
School Attendance of Children**

	Location			Sex		Age (yrs.)			
	Ed	Calg	Other	Male	Female	18-29	30-39	40-54	55+
<hr/>									
PERCENT									
If a child with AIDS were to attend my child's school, I would take my child out of the school.									
Disagree* (73.1%)	67.8	77.4	82.4	71.8	74.5	70.9	76.2	75.8	67.4
Agree (11.4%)	13.4	9.9	11.2	12.2	10.5	11.2	9.4	11.5	15.2
	p=.011			p=.133		p=.603			

There was no significant difference among respondents regarding school attendance of children when considered on the basis of gender, age, education, or risk status for HIV infection. As Table 27 indicates, those who knew or had known a person with AIDS were more tolerant in this respect, as were those who perceived their chances of getting AIDS as not high.

## Health Care for Persons with AIDS

When asked whether "People who get AIDS deserve first class health care", only 13% of respondents disagreed with this statement. Table 24 indicates that there were no significant regional differences among Albertans in this respect; the right to universal access to the best possible health care in the province is strongly supported by most Albertans in this study, irrespective of their location. Similarly, no differences on this issue were evident on the basis of marital status (Table 26), or according to the self-reported risk of respondents for HIV infection and AIDS (Table 27).

A few differences between respondents are evident, however, with regard to the provision of 'first class' health care for persons with AIDS. In particular, females are somewhat more likely than men to agree with this position, as are persons in the age group from 40 to 54 years (Table 24).

**Table 24. Location, Sex, Age and  
Health Care for Persons with AIDS**

	Location			Sex		Age (yrs.)			
	Ed	Calg	Other	Male	Female	18-29	30-39	40-54	55+
<hr/>									
PERCENTAGE									
"People who get AIDS deserve first class health care."									
Disagree (12.8%)	11.5	11.0	14.4	16.5	8.9	26.3	12.7	9.7	12.7
Agree* (59.1%)	62.3	58.6	48.0	54.7	64.0	55.5	59.6	68.6	51.4
	p=.800			p=.000		p=.002			

As the level of education among respondents rises, so too does their support for the provision of first class health care for people who get AIDS. Further, those who do know or have known a person with AIDS are much more likely than any other group of respondents to support the provision of optimal health care to persons with AIDS.

Finally, among all those who agreed that people who get AIDS deserve first class health care (71.1% of those who responded), 82.0% felt that this should be done "regardless of what it costs". Economic restraint in the area of AIDS care and treatment programs does not appear to have much support among the representative sample of Albertans who gave their opinions about this subject.

**Table 25. Location, Sex, Age and  
Attitudes Towards Those With AIDS**

	Location			Sex		Age (yrs)			
	Ed	Calg	Other	Male	Female	18-29	30-39	40-54	55+
<hr/>									
PERCENT									
1. Most AIDS victims deserve what they got.									
Disagree* (61.6%)	61.8	68.7	57.2	57.1	65.3	64.2	68.9	63.7	44.8
Agree (16.1%)	17.8	13.7	16.8	19.2	13.2	11.7	12.2	17.0	27.5
	p=.004			p=.000		p=.000			
2. If a child with AIDS were to attend my child's school, I would take my child out of the school.									
Disagree* (73.1%)	67.8	77.4	82.4	71.8	74.5	70.9	76.2	75.8	67.4
Agree (11.4%)	13.4	9.9	11.2	12.2	10.5	11.2	9.4	11.5	15.2
	p=.011			p=.133		p=.603			
3. People who get AIDS deserve first class health care.									
Disagree (12.8%)	11.5	11.0	14.4	16.5	8.9	26.3	12.7	9.7	12.7
Agree* (59.1%)	62.3	58.6	48.0	54.7	64.0	55.5	59.6	68.6	51.4
	p=.800			p=.000		p=.002			

\*Positive attitudes towards those with AIDS include the two most extreme categories on the seven point scale ("strongly disagree" for the first two items, "strongly agree" for the last one). Negative attitudes include the three most extreme categories.



**Table 26. Education, Marital Status, and  
Attitudes toward Persons with AIDS**

	Marital Status						Education			
	NMar	Mar	CLaw	Div	Sep	Wid	<HS	HS	HS+	PSec
<hr/>										
PERCENT										
1. Most AIDS victims deserve what they got.										
Disagree* (61.6%)	66.7	58.3	78.2	72.4	57.5	50.2	53.1	57.3	71.0	65.7
Agree (16.1%)	12.8	17.6	10.1	11.6	19.4	23.2	25.3	14.8	11.8	13.2
			p=.056					p=.000		
2. If a child with AIDS were to attend my child's school, I would take my child out of the school.										
Disagree* (73.1%)	76.1	73.4	72.2	75.0	68.7	61.1	63.8	70.9	79.9	77.1
Agree (11.4%)	9.4	11.2	14.1	12.9	13.1	14.8	18.5	10.1	8.8	9.1
			p=.493					p=.000		
3. People who get AIDS deserve first class health care.										
Disagree (12.8%)	17.0	11.6	8.7	13.5	21.3	9.3	18.7	12.6	11.7	9.3
Agree* (59.1%)	56.8	58.5	64.4	68.4	58.3	58.3	49.4	54.8	63.7	66.3
			p=.182					p=.000		

\*Positive attitudes towards those with AIDS include the two most extreme categories on the seven point scale ("strongly disagree" for the first two items, "strongly agree" for the last one). Negative attitudes include the three most extreme categories.

**Table 27. Self-Reported Risk, Knowledge of a Person with AIDS,  
and Attitudes toward Persons with AIDS**

	Risk		Know a Person with AIDS		Chances of Getting AIDS			
	High	Low	Yes	No	High	Med.	Low	None
<hr/>								
PERCENT								
1. Most AIDS victims deserve what they got.								
Disagree* (61.6%)	59.4	72.0	75.9	50.1	71.6	73.4	66.5	55.3
Agree (16.1%)	16.1	17.2	11.2	16.7	28.4	10.7	12.4	19.1
	p=.003		p=.002		p=.005			
2. If a child with AIDS were to attend my child's school, I would take my child out of the school.								
Disagree* (73.1%)	73.2	72.6	89.7	71.3	53.0	78.6	75.6	72.7
Agree (11.4%)	11.1	12.8	3.3	12.3	36.5	13.1	7.7	12.8
	p=.116		p=.000		p=.008			
3. People who get AIDS deserve first class health care.								
Disagree (12.8%)	12.4	14.9	4.0	13.6	9.8	13.9	12.8	12.7
Agree* (59.1%)	58.3	64.0	71.6	70.0	64.7	60.6	61.2	57.7
	p=.117		p=.002		p=.354			

\*Positive attitudes towards those with AIDS include the two most extreme categories on the seven point scale ("strongly disagree" for the first two items, "strongly agree" for the last one). Negative attitudes include the three most extreme categories.

## Summary

Among the 1,245 Albertans surveyed in this study, 61.6% disagreed that "Most AIDS victims deserve what they got".

Greater tolerance of persons with AIDS was evident among those who personally knew, or had known, a person with AIDS. Those who rated their chances of getting the AIDS virus as 'high' or 'medium' were also much less likely to blame the AIDS victim for getting the disease.

About 73% of respondents disagreed with the statement, "If a child with AIDS were to attend my child's school, I would take my child out of the school."

Eighty-seven percent (87%) agreed that "People who get AIDS deserve first class health care". This support is especially evident among women, persons in the age group from 40 to 54 years, those with higher levels of education, and those who know, or have known a person with AIDS.

Among all those who agreed that persons with AIDS deserve first class health care, 82% said that this should be provided "regardless of what it costs". Economic restraint in the area of AIDS care and treatment programs does not appear to have much support among the 1,245 adult Albertans who gave their opinions on this subject.

#### IV. DISCUSSION

A cumulative total of 303 diagnosed cases of AIDS were reported in Alberta from 1983 to the end of 1990, and it is estimated that approximately 4,545 to 7,575 persons in Alberta were infected with the Human Immunodeficiency Virus (HIV) as of December, 1990. However, based on the representative sample of 1,245 adult Albertans included in this study, over 90% of Albertans rate their chances of getting AIDS as 'low' or nonexistent. Complacency about HIV/AIDS remains a major problem among Albertans, a situation which has changed little since identified in the provincial strategy document on AIDS (ACOH, 1987). The finding that only 4.3% of the study sample spontaneously identified AIDS as an important health and social issue reinforces this observation.

It is of considerable concern that persons who report behaviours risky for HIV transmission are not more likely to see themselves as being at greater risk for HIV infection and AIDS. Unfortunately, these respondents are somewhat less likely to be well-informed about the direct relationship between HIV seropositivity and the probability of developing AIDS. Such misinformation is highest among young adults in the age range from 18 to 29 years. Those at greater risk for HIV infection are also not more likely to use condoms as a means of practising safer sex, a finding which suggests that sexual behaviours among adult Albertans have not changed appreciably in response to the potential threat of AIDS.<sup>9</sup> Therefore, future studies should

---

<sup>9</sup>However, the 9.3% of study participants who know, or have known, a person with AIDS are more likely to perceive that they might develop AIDS in the future and to expect personal testing for HIV seropositivity in the next twelve months. Even so, only 14.5%

investigate the factors and mechanisms which contribute to self-perceived risk for AIDS, especially in view of their importance for designing interventions to change preventive actions associated with high risk for HIV infection and AIDS.

Testing for HIV infection is one of the most controversial issues in the development of public policies to address the management of AIDS. As Ornstein (1989; 74) states,

"Ideally, such policies would simultaneously protect individual's rights to determine how much and what information they have about their health status, assure that individuals exercise reasonable prudence in preventing the spread of infection, and provide health planners and health educators with the information needed to plan the delivery of care and discourage the spread of infection."

Mandatory testing for AIDS is one such controversial issue confronting Albertans. In contrast to the lack of support for mandatory AIDS testing identified by the provincial AIDS Program, 55.3% of the 1,245 persons in this study agree that employers should have the right to require an employee to be tested for HIV infection. These conflicting views suggest that Albertans may be unaware of reasons for current government policies regarding mandatory testing for HIV seropositivity. These reasons need to be better communicated to the public in order to promote understanding of public policy on AIDS testing. Further, as the target groups for AIDS testing most



often identified by respondents are not consistent with the prevalence of AIDS cases among various social groups, further education is necessary to allay unnecessary fears of HIV contagion and prevent discrimination against members of social groups with low rates of HIV infection.

Indicative of the low levels of self-perceived AIDS risk among adult Albertans, only a small minority (9.7%) of the study participants personally expect to be tested for the AIDS virus at some time in the next 12 months. However, given assurances of confidentiality of test results, fully 88.8% said they would agree to be tested for HIV seropositivity if requested to do so. Further, almost all (91%) respondents said they would want to know the results of their AIDS tests, and the vast majority (74%) supported the position taken by the Alberta government in support of informed consent as a prerequisite for AIDS testing. A high degree of compliance with AIDS testing, under conditions of confidentiality and informed consent, is therefore anticipated if widespread provincial testing for HIV seroprevalence is initiated in future. Albertans appear quite willing to participate in such a testing program, even though most consider their chances of getting AIDS as low or nonexistent.

The majority of Albertans in this study appear to have tolerant attitudes toward persons with AIDS, as indicated by their disagreement with the statement that "Most AIDS victims deserve what they got". However, a substantial minority of Albertans agree with this statement, a finding consistent with that reported by Blendon and Donelan (1988). And, while most persons say that they would not take their child out of school to avoid contact with a classmate with AIDS, it is important to note that about 25% of

respondents said they would do so. Residents of Edmonton, and persons with lower levels of education, are most likely to agree with withdrawing a child from school in order to prevent contact with a child who has AIDS. It seems that further AIDS education is needed to reassure this segment of the public.

Notably, Albertans overwhelmingly oppose discrimination in access to health care for persons with AIDS, regardless of the financial costs to the public purse. This finding is important in view of current economic challenges facing the health care system, and it reinforces Albertans' ongoing support for a universally accessible, first class health care system in this province.

Current public opinion about HIV infection and AIDS exists in a context of little personal experience with the epidemic. The overwhelming majority (90.7%) of Albertans in this study state that do not know, or have known, a person with AIDS. Thus, a key question about Albertans' attitudes toward persons with AIDS is this: Will the progression of the AIDS epidemic lead to more or less tolerance? One possibility is that the increased prevalence of the disease will lead to more tolerant attitudes as AIDS strikes a larger number of individuals and families from differing social backgrounds. The other is that as more Albertans are personally threatened by HIV infection and AIDS, intolerance and discriminatory practices will increase. Therefore, it is essential that public opinion is assessed over time, and that the public policy implications of any significant shifts in public attitudes and behaviours toward persons with AIDS be identified.

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## **APPENDIX A: AIDS SURVEY QUESTIONS**

**APPENDIX A: AIDS QUESTIONS ON THE 1990 ALL ALBERTA SURVEY**

68. Have you ever personally known anyone with AIDS or the AIDS virus?

yes	1
no	2
don't know	8

69. Please tell me your opinion on the following statement:

Employers should have the right to require an employee to be tested for the AIDS virus.

strongly agree	1
agree	2
disagree	3
strongly disagree	4
undecided (volunteered)	8

71. What are your chances of getting the AIDS virus? Do you think they are

high	1
medium	2
low	3
none	4
don't know (volunteered)	8

72. Do you expect to have a blood test for infection with the AIDS virus in the next 12 months?

yes	1
no	2
never heard of the test	3
don't know	8

73. AIDS has been described as one of the major health problems in the country. A study may be done and blood samples taken to find out just how widespread the problem is.

a. If you were selected in this national sample of people to have their blood tested with assurances of privacy of test results, would you have the test?

yes	1
no	2
don't know	8

b. If you had your blood tested, would you insist on knowing the results?

yes	1
no	2
don't know	8

c. Should people's blood be tested for the AIDS virus without their knowledge it was being done?

yes	1
no	2
don't know	8

74. Please tell me if you think any of the following people should be tested for AIDS, even if they do not give consent? (**Read**)

	YES	NO	DK
health care workers	1	2	8
recipients of blood transfusions	1	2	8
blood donors and organ donors (e.g. <i>kidneys</i> )	1	2	8
patients entering hospital	1	2	8
the military and airline pilots	1	2	8
homosexuals ( <i>gay men</i> )	1	2	8
bisexual men	1	2	8
prostitutes (male or female)	1	2	8
injection drug users	1	2	8
any others? ( <b>specify</b> )	1	2	8

76.a. In your estimation, what percentage of people who now have the AIDS virus will eventually get sick with AIDS? Would it be ...

less than 10%	1
10 to 49%	2
50 to 89%	3
90 to 100%	4
don't know (volunteered)	8

b. In your estimation, what percentage of people who now have the AIDS virus are actually sick with AIDS? Would it be ...

less than 10%	1
10 to 49%	2
50 to 89%	3
90 to 100%	4
don't know (volunteered)	8

77. Please tell me how much you agree or disagree with these statements:

a. Most AIDS victims deserve what they got (*i.e. the AIDS disease*)

Strongly Disagree							Strongly Agree	Don't Know
1	2	3	4	5	6	7	8	

b. If a child with AIDS were to attend my child's school, I would take my child out of the school.

Strongly Disagree							Strongly Agree	Don't Know
1	2	3	4	5	6	7	8	

c. People who get AIDS deserve first class health care.

Strongly Disagree							Strongly Agree	Don't Know
1	2	3	4	5	6	7	8	

d. **ASK IF "c" is AGREE (e.g. 5,6, or 7).**

Is that the case regardless of what it costs? (**Read**)

yes	1
no	2
don't know (volunteered)	8



78. I am going to read a list of statements. Please tell me after I finish all of the statements if at least one is true for you. (**Read slowly**)

- a. You have used drugs by needle at any time since 1977.
- b. You have haemophilia and have received clotting factor concentrates since 1977.
- c. You are a man who has had sex with another man at some time since 1977, even one time.
- d. You have had sex for money or drugs at any time since 1977.
- e. Since 1977, you are or have been the sex partner of any person who would answer yes to any of the items I've just read.

Were any of the statements I read true for you?

- |                     |                        |
|---------------------|------------------------|
| yes to at least one | 1 ( <b>Read 79</b> )   |
| no to all of them   | 2 ( <b>Go to 80a</b> ) |
| refused to say      | 3 ( <b>Go to 80a</b> ) |

79. **Interviewer: If YES to at least one statement read:**

"The fact that you answered 'yes' may indicate that you are at risk for AIDS. It is important for you to discuss with your doctor whether you should be tested for the AIDS virus."

80. a. In the last two years have you had sex with at least one new partner?

- |     |                       |
|-----|-----------------------|
| yes | 1 ( <b>Ask b</b> )    |
| no  | 2 ( <b>go to 81</b> ) |

b. How many new partners did you have?

\_\_\_\_\_ partners

c. Did you use a condom all of the time, most of the time, some of the time, or not at all?

- |                  |   |
|------------------|---|
| all of the time  | 1 |
| most of the time | 2 |
| some of the time | 3 |
| not at all       | 4 |

## **APPENDIX B: RECOMMENDATIONS**

## **APPENDIX B: RECOMMENDATIONS**

1. Few respondents in this study were well informed about HIV seroprevalence in the Canadian population. Given the lack of correct information and the particularly high levels of misinformation evidenced among this representative sample of adult Albertans, enhancement of HIV/AIDS educational efforts is strongly recommended.

1.1. Continued emphasis needs to be placed on the use of condoms as as a means of practicing safer sex and preventing the transmission of the human immunodeficiency virus.

1.2 The lack of accurate information about HIV/AIDS among young adults and among those who report engaging in 'high risk' behaviours underlines the importance of targetting these groups in educational efforts.

1.3 As those respondents at greater risk for HIV seropositivity and AIDS were widely distributed throughout the province and across all socioeconomic segments of society, HIV/AIDS educational programs should continue to be broadly based.

2. As those respondents who report behaviours that involve greater risk for HIV seropositivity and AIDS are, nonetheless, not likely to perceive their chances of getting AIDS as 'high', and since safer sexual practices are not widely practised in the high risk groups identified in this study, additional qualitative and quantitative research should be conducted to identify barriers and bridges to safer sexual practices among Albertans.

3. Attitudes towards AIDS testing reveal that Albertans may be unaware of the reasons behind government policy regarding mandatory testing and confidentiality of AIDS test results. These reasons need to be better communicated to the public. Further, Albertans need to be better informed about their risks for acquiring HIV/AIDS, and about the indicators for tests of HIV seropositivity.

4. Most Albertans have tolerant attitudes towards AIDS victims. These attitudes should be supported through public AIDS education efforts and programs for the care and treatment of persons with AIDS.

5. Most respondents do not perceive that they have even a moderate risk of 'getting AIDS', even if they reported behaviour which places them at greater risk for HIV infection and AIDS. Further analyses of this data should be conducted to examine factors which may influence self-perceptions of risk for AIDS. What social conditions influence the relationship between reported AIDS risk and perceived risk of getting AIDS? Does AIDS information effectively alter this relationship?

5. This survey provides a useful baseline for the study of change in HIV/AIDS-related knowledge, attitudes and behaviours among adult Albertans. A panel study should be conducted approximately two years after the time of the initial data collection (i.e. in 1992) in order to investigate changes in AIDS knowledge, policy relevant attitudes about AIDS, perceived risks of HIV infection and AIDS, and self-reported risk behaviours for transmission of the HIV among the provincial population. This initial survey

collected the information necessary to make such a follow-up study possible. Should additional province-wide estimates of conditions in 1992 be desired, an additional, separate sample of Albertans should be interviewed.







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